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APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
08/623,852	03/26/96	HARD	R 523852

EXAMINER

11M1/0826

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ART UNIT	PAPER NUMBER
1193	6

DATE MAILED: 08/26/97

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

OFFICE ACTION SUMMARY

☒ Responsive to communication(s) filed on _____

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☑ Claim(s) 1-13 is/are pending in the application.
Of the above, claim(s) _____ is/are withdrawn from consideration.
☐ Claim(s) _____ is/are allowed.
☑ Claim(s) 1-13 is/are rejected.
☐ Claim(s) _____ is/are objected to.
☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
☐ The specification is objected to by the Examiner.
☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.
☐ received in Application No. (Series Code/Serial Number) _____.
☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☑ Notice of Reference Cited, PTO-892
☑ Information Disclosure Statement(s), PTO-1449, Paper No(s). 3, 5
☐ Interview Summary, PTO-413
☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
☐ Notice of Informal Patent Application, PTO-152

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, "predetermined" is indefinite, Joseph E. Seagram & Sons, Inc. v. Marzall, 84 USPQ 180.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bender '490 or Canada 770058 each taken with Pazdej '777.

Bender teaches the process of solubilizing metals from metal containing material by contacting with sulfuric acid containing a reducing agent and a carbon source (see claims 1,29,36 and the examples).

Canada '058 teaches the process of solubilizing metals from a metal containing material by contacting with sulfuric acid containing carbon and a reducing gas (see pp. 4,9).

Each of Bender and Canada '058 differs in that the sulfuric acid containing hydrofluoric acid is not stated.

Pazdej teaches the use of sulfuric acid and hydrofluoric acid to solubilize metals (see the figures and claims).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use sulfuric acid containing hydrofluoric acid to dissolve metals in the process of Bender or Canada '058 because that is what is taught by Pazdej as desirable.

The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to select the portion of the prior art's range which is within the range of applicant's claims because it has been held to be obvious to select a value in a known range by optimization for the best results, see In re Aller, 105 USPQ 233.

The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range disclosed by the reference because overlapping ranges have been held to be a prima facie case of obviousness, In re Malagari, 182 USPQ 549.

Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foos '453 taken with either Gustison '511 or Meyer '389.

Foos teaches the process of solubilizing metal from metal containing material by contacting with sulfuric acid solution containing a reducing agent (see cols. 2-3). Official Notice is taken by the examiner that the metal containing material which is an ore contains carbon and would provide the instantly claimed carbon source when contacted with the sulfuric acid solution.

Foos differs in that the sulfuric acid containing hydrofluoric acid is not stated.

Each of Gustison and Meyer teaches the use of HF containing sulfuric acid to solubilize metals (see col. 1 and col 3, respectively).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use an HF containing sulfuric acid solution in the process of Foos because each of Gustison and Meyer teaches this as desirable for dissolving metal values.

The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to select the portion of the prior art's range which is within the range of applicant's claims because it has been held to be obvious to select a value in a known range by optimization for the best results, see In re Aller, 105 USPQ 233.

The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range disclosed by the reference because overlapping ranges have been held to be a prima facie case of obviousness, In re Malagari, 182 USPQ 549.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Bos whose telephone number is (703) 308-2537.

sjb

August 20, 1997

STEVEN BOS
PRIMARY EXAMINER
GROUP 1100